

Amendments to the Claims:

The claims are not amended in this response. For convenience, the claims are reproduced as follows:

1 1. (original) An electronic pressure sensitive transducer producing
2 an electrical signal indicative of applied pressure, the transducer comprising:
3 a printed circuit board accepting a plurality of electronic elements for
4 processing the transducer electrical signal;
5 a plurality of conductive traces formed on the printed circuit board to
6 define a contact area;
7 a flexible substrate having an inner surface positioned over the contact
8 area;
9 an adhesive spacer substantially surrounding the contact area, the
10 adhesive spacer attaching the flexible substrate to the printed circuit board; and
11 at least one resistive layer deposited on the flexible substrate inner
12 surface, the resistive layer contacting at least two of the traces in response to pressure
13 applied to the flexible substrate to produce the electrical signal indicative of applied
14 pressure.

1 2. (original) An electronic pressure sensitive transducer as in claim
2 1 wherein at least one resistive layer comprises resistive ink.

1 3. (original) An electronic pressure sensitive transducer as in claim
2 1 further comprising a pedestal formed on the printed circuit board substantially
3 around the contact area, the pedestal receiving the adhesive spacer.

1 4. (original) An electronic pressure sensitive transducer as in claim
2 3 wherein the pedestal comprises conductive traces covered with a non-conductive
3 material.

1 5. (original) An electronic pressure sensitive transducer as in claim
2 1 wherein the plurality of conductive traces comprise:
3 a plurality of sets of traces, each set of traces interconnected within a
4 zone of the contact area; and
5 an interconnected set of common traces extending into each zone.

1 6. (original) An electronic pressure sensitive transducer as in claim
2 5 wherein at least one interconnected set of traces is connected to the electronic
3 elements for processing the transducer electrical signal via a through-hole in the
4 printed circuit board.

1 7. (original) An electronic pressure sensitive transducer as in claim
2 6 wherein the through-hole is within the contact area.

1 8. (original) An electronic pressure sensitive transducer as in claim
2 1 wherein conductive traces are arranged in interconnected sets, with at least two sets
3 of traces interdigitated.

1 9. (original) An electronic pressure sensitive transducer as in claim
2 1 wherein conductive traces comprise copper traces covered with an oxidation
3 preventing conductive material.

1 10. (original) An electronic pressure sensitive transducer as in claim
2 1 wherein conductive traces comprise screen printed carbon ink.

1 11.-20. (withdrawn)

1 21. (original) A printed circuit board electronic pressure sensitive
2 transducer assembly comprising:

3 a printed circuit board accepting a plurality of electronic elements for
4 processing pressure transducer electrical signals;
5 a plurality of conductive traces formed on the printed circuit board to
6 define a contact area;
7 a flexible substrate having an inner surface positioned over the contact
8 area;
9 an adhesive spacer substantially surrounding the contact area, the
10 adhesive spacer attaching the flexible substrate to the printed circuit board; and
11 at least one resistive layer comprising a resistive ink deposited on the
12 flexible substrate inner surface, the resistive layer contacting at least two of the
13 contact area conductive traces in response to pressure applied to the
14 flexible substrate.

1 22. (original) A printed circuit board electronic pressure sensitive
2 transducer assembly as in claim 21 further comprising a pedestal formed on the
3 printed circuit board, the pedestal substantially surrounding the contact area, the
4 pedestal receiving the adhesive spacer.

1 23. (original) A printed circuit board electronic pressure sensitive
2 transducer assembly as in claim 22 wherein the pedestal comprises a conductive
3 material coated with a non-conductive material, the conductive material formed on
4 the printed circuit board.

1 24. (original) A printed circuit board electronic pressure sensitive
2 transducer assembly as in claim 21 wherein the plurality of conductive traces
3 comprise:

4 a plurality of sets of traces, each set of traces interconnected within a
5 zone of the contact area; and

6 an interconnected set of common traces extending into each zone.

1 25. (original) A printed circuit board electronic pressure sensitive
2 transducer assembly as in claim 24 wherein at least one interconnected set of traces
3 is connected to the electronic elements for processing the transducer electrical signal
4 via a through-hole in the printed circuit board.

1 26. (original) A printed circuit board electronic pressure sensitive
2 transducer assembly as in claim 25 wherein the through-hole is within the contact
3 area.

1 27. (original) A printed circuit board electronic pressure sensitive
2 transducer assembly as in claim 21 wherein conductive traces are arranged in
3 interconnected sets, with at least two sets of traces interdigitated.

1 28. (original) An electronic pressure sensitive transducer as in claim
2 21 wherein the adhesive spacer comprises adhesive ink.

1 29. (original) A printed circuit board electronic pressure sensitive
2 transducer assembly as in claim 21 wherein conductive traces comprise copper traces
3 covered with an oxidation preventing conductive material.

1 30. (original) A printed circuit board electronic pressure sensitive
2 transducer assembly as in claim 21 wherein conductive traces comprise screen printed
3 carbon ink.

1 31. (original) A printed circuit board electronic pressure sensitive
2 transducer assembly comprising:
3 a printed circuit board accepting a plurality of electronic elements for
4 processing pressure transducer electrical signals;
5 a plurality of conductive traces formed on the printed circuit board to
6 define a contact area;

7 a pedestal substantially surrounding the contact area, the pedestal
8 forming a flat area higher than the conductive traces;
9 a flexible substrate having an inner surface positioned over the contact
10 area;
11 an adhesive spacer substantially surrounding the contact area, the
12 adhesive spacer attaching the flexible substrate to the pedestal; and
13 at least one resistive layer deposited on the flexible substrate inner
14 surface, the resistive layer contacting at least two of the contact area conductive
15 traces in response to pressure applied to the flexible substrate.

1 32. (original) A printed circuit board electronic pressure sensitive
2 transducer assembly as in claim 31 wherein the pedestal is formed by depositing a
3 non-conductive layer over a conductive layer, the conductive layer formed on the
4 printed circuit board.

1 33. (original) An electronic pressure sensitive transducer as in claim
2 31 wherein at least one resistive layer comprises resistive ink.

1 34. (original) An electronic pressure sensitive transducer as in claim
2 31 wherein the adhesive spacer comprises adhesive ink.

1 35. (original) A printed circuit board electronic pressure sensitive
2 transducer assembly as in claim 31 wherein the plurality of conductive traces
3 comprise:

4 a plurality of sets of traces, each set of traces interconnected within a
5 zone of the contact area; and

6 an interconnected set of common traces extending into each zone.

1 36. (original) A printed circuit board electronic pressure sensitive
2 transducer assembly as in claim 35 wherein at least one interconnected set of traces

3 is connected to the electronic elements for processing the transducer electrical signal
4 via a through-hole in the printed circuit board.

1 37. (original) A printed circuit board electronic pressure sensitive
2 transducer assembly as in claim 36 wherein the through-hole is within the contact
3 area.

1 38. (original) A printed circuit board electronic pressure sensitive
2 transducer assembly as in claim 31 wherein conductive traces are arranged in
3 interconnected sets, with at least two sets of traces interdigitated.

1 39. (original) A printed circuit board electronic pressure sensitive
2 transducer assembly as in claim 31 wherein conductive traces comprise copper traces
3 coated with an oxidation preventing conductive material.

1 40. (original) A printed circuit board electronic pressure sensitive
2 transducer assembly as in claim 31 wherein conductive traces comprise screen printed
3 carbon ink.

1 41.-53. (withdrawn)